

CLAIMS

I claim:

1 1. A rotating shearing device for cropping fast-running rolling stock,
2 comprising:
3 a shearing device frame;
4 two axially cutting annular knives mounted in said shearing device frame for
5 rotation about respective axes at the same rotational speed, each of said two annular knives
6 having end cutting edges directed toward one another, said cutting edges converging to a cutting
7 position with a clearance necessary to separate the rolling stock during a cutting operation, said
8 two annular knives arranged at an acute angle to one another and intersect one another along a
9 line;
10 a front guide arranged for guiding the rolling stock to said shearing device frame,
11 said front guide being switchable between an upper end position and a lower end position; and
12 a rear guide arranged for guiding a first crop of the running stock, the running
13 stock, and a rear crop of the running stock from said shearing device frame, said rear guide
14 having three fixed rear guide parts,
15 wherein said shearing device frame is movable relative to said rear guide between
16 a lower basic position and a high position.

1 2. A method for separating a front crop and a rear crop from a running
2 rolling stock using a rotating shearing device, wherein the rotating shearing device has a shearing
3 device frame, two axially cutting annular knives mounted in said shearing device frame, a front
4 guide arranged for guiding the rolling stock to said shearing device frame, the front guide being

5 switchable between an upper end position and a lower end position, and a rear guide arranged for
6 guiding the rolling stock from said shearing device frame, the rear guide having three fixed rear
7 guide parts, wherein the shearing device frame is movable relative to the rear guide between a
8 lower basic position and a high position, the method comprising the steps of:

9 introducing a start of the running rolling stock into a free space between the
10 annular knives and into the lower one of the three fixed rear guide parts by the front guide part in
11 an initial state of the rotating shearing device in which the front guide part is in a lower end
12 position, the shearing device frame is in the basic position and the annular knives are in the
13 cutting position;

14 pivoting the front guide part up to a middle position for separating the front crop
15 with the annular knives and discharging the front crop into the lower guide part of the three rear
16 guide parts;

17 running the rolling stock through the shearing device above the annular knives
18 into the middle guide part of the three rear guide parts for guidance to a winder;

19 opening the annular knives and moving the shearing device frame into the high
20 position;

21 closing the annular knives into the cutting position and subsequently pivoting the
22 front guide part upward for separating the rear crop with the annular knives and discharging the
23 rear crop through an upper guide part of the three rear guide parts; and

24 pivoting the front guide part to the lower end position and moving the shearing
25 device frame back to the lower basic position for establishing the initial state.